

# Fuels and Fire Behavior Advisory

## Southern Area

### Southern Appalachian Mountains

November 10<sup>th</sup> – November 24<sup>th</sup>



**Subject:** Critical fuel dryness with ERC values above the 90<sup>th</sup> percentile will support significant fire development in timber and brush fuels when elevated or stronger fire weather is present.

**Discussion:** All dryness and drought metrics are in agreement with the expanding and intensifying dryness in the area of concern. ERC percentiles are above the 90<sup>th</sup> percentile throughout this area and many locations are setting record high values for this time of year. 1000 hour FM values are below the 3<sup>rd</sup> percentile. KBDI values are above the 97<sup>th</sup> percentile throughout the area. Rainfall deficits less than 25% of normal for both 30 and 60 day periods are widespread and expanding in the area of concern. The most recent drought monitor continues to expand all levels of drought intensities within the area of concern.

**Difference from normal conditions:** Normal climatology for November would trend cool and moist. The current trend is warm and dry. Currently the area of concern is experiencing climatology that is trending opposite of normal climatology. This divergence can be seen in the seasonal ERC graphs for the area of concern. Early November saw numerous records broken for daily max temperature.

**Concerns to Firefighters and the Public:** Any fire in this area will be very resistant to control efforts. Expect complete consumption of fuels down to mineral soil or rock, frequent torching, and increased spotting. Fire intensities will be higher than normal which will likely preclude direct attack of fires. Expect the need for extended mop-up. The leaf drop will elevate Rates of Spread from those observed over the past few weeks and increase the potential for spotting, slop-over, and ineffective control lines. Expect an increase in long duration fires; with heavy fuels being available to burn. Reburn potential is increasing with continued leaf fall and persistent heat in heavy dead fuels.

**Mitigation Measures** Do not expect any fire to be routine. Be prepared to utilize indirect tactics with extended mop-up. Also, practice good, basic fire tactics such as anchor and flank. Utilization of aviation assets may be needed to cool the edge of the fire, allowing ground crews to get close. Utilize aerial supervision to help direct crews and keep them informed on fire behavior. Ensure that LCES is in place before engaging on any fire. Remember to STOP, THINK and TALK before you ACT...actively look for ways to minimize risk to firefighters in what is forecast to be a period of very high fire danger.

## Area of Concern

